

ILLINOIS COMMERCE COMMISSION

DOCKET NO. 07-0332

EXHIBIT NO. 1.0.1

SUPPLEMENTAL DIRECT TESTIMONY OF ARTHUR R. OLSON

RME ILLINOIS, LLC

1 Q. State your name for the record.

2
3 A. Arthur R. Olson. I am managing member of RME Illinois, LLC, an Illinois
4 Limited Liability Company.

5
6 Q. What is the total amount of acreage for the area for which a Certificate is being
7 requested in this proceeding

8
9 A. The area for which the Certificate is being requested in this proceeding is 22.5
10 acres.

11
12 Q. What is a breakdown by acreage, of the current use of the total acreage for the
13 area that is the subject of this proceeding

14
15 A. The property is mostly scrub second growth with some wetlands. The property
16 was farmed in excess of ten years ago. No buildings remain from the farm.

17
18 Q. What is the amount of acreage that may be removed from current use due to the
19 construction of the subdivision

20
21 A. The entire site is being developed with approximately 10.51 acres in lots and
22 roadway right-of-way and 12.5 acres in open space which includes the onsite drip
23 dispersal system which will have a prairie grass and prairie wildflower cover.

24
25 Q. Give a brief description of the sewer facilities including statements of the design
26 capacities of the components of the sewer facilities and the maximum hourly and
27 average inflows which are anticipated

28
29 A. The Decentralized community/cluster wastewater system is composed of a 1500
30 gallon Orenco fiberglass septic tank CW style with pump vault (step assembly),
31 Biotube filter, Orenco Effluent Pump Model PF100511 and a Vericom Remote
32 Telemetry System on each lot. The septic tank treated effluent is pumped under
33 pressure in a main line used by all residences of the subdivision to a 6,000 gallon
34 fiberglass recirculation-blend tank, manufactured by Xerxes, with associated
35 pumps and remote telemetry controls in conjunction with six Orenco AdvanTex
36 AX100 Media Filters for Advanced Treatment. The advanced treated effluent is
37 forwarded to a 4,000 gallon pump tank manufactured by Xerxes with associated
38 pumps and remote telemetry controls. The effluent is pumped through an
39 American Manufacturing multizone drip dispersal system control unit with
40 associated telemetry into three drip zones utilizing Bioline drip tubing for in
41 ground dispersal. The average residence will use approximately 200 gallons of
42 water per day or 1800 gallons for the entire proposed system. The two advanced
43 AdvanTex AX100 media filters, pumps and tanks have an average capacity to
44 process 5,000 gallons per day and a maximum capacity of 10,000 gallons per day.
45 The subsurface dispersal system is designed for a capability of 4,320 gallons per
46 day. The system has a safety factor of over 2.3 for the entire system.

- 47
- 48 Q. What type of pipe is being used in the sewer collection system include the type of
- 49 material from which the pipe will be manufactured?
- 50
- 51 A. The sewer lateral from the septic tank to the main line shall utilize 1" HDPE
- 52 SDR-11 PE 3408 pressure rated for 160 psi butt or fusion welded and the main
- 53 line sewer shall utilize 2" HDPE DR-11 PE 3408 pressure rated for 160 psi butt or
- 54 fusion welded.
- 55
- 56 Q. Provide a statement evidencing that the sewer mains and sewer laterals proposed
- 57 are of adequate size and are to be laid to permit an expeditious flow from point of
- 58 origin at the customer's premises to the point of sewer treatment or disposal and if
- 59 land contours are not such as to permit transport of the outflow by gravity, will
- 60 adequate lift stations or other adequate sewer facilities be provided as a part of the
- 61 Company's sewer system and if, in lieu of or as adjunct to such lift stations, force
- 62 pumps are proposed to be installed to move sewage away from a customer's
- 63 premises, a full description of the equipment and of the manner and means of its
- 64 operation shall be stated.
- 65
- 66 A. The system shall be composed of a 4" Customer sewer lateral from the customer's
- 67 premises to the STEP (Septic Tank Effluent Pump) tank. This sewer shall be a
- 68 gravity sewer and shall be installed according to the plumbing code. From the
- 69 STEP tank to the Collection sewer a 1" lateral shall be installed. The sewer
- 70 lateral shall be manufactured of HDPE DR11 PE 3408 pressure rated at 160 psi.
- 71 The lateral shall be pressurized by means of the STEP system located in the septic
- 72 tank. A high head effluent pump, Orenco Model PF100511, is utilized to
- 73 pressurize the system. The pump is sized and performs within the manufactures
- 74 published pump curve for the system as designed. Typical effluent sewer mains
- 75 are two inches in diameter for up to 100 equivalent dwelling units and four inches
- 76 in diameter for up to 500 equivalent dwelling units. The peak flow rate for the
- 77 proposed subdivision is 19.5 GPM which is well within the acceptable flow
- 78 parameters for a 2" sewer main. The pump selected for each residence is based
- 79 on the flow in gallons per minute and the TDH (total dynamic head). The pump
- 80 selected for this installation is the Orenco PF100511 pump with a 1/4" flow
- 81 controller which limits the flow from the tank to 5 GPM. The pump selected is
- 82 well within the manufactures pump curve based on flow and TDH. Backflow
- 83 preventers are installed in the septic tank and at the service connection to the main
- 84 line to prevent wastewater from backing up into the residence. A roll seal valve is
- 85 to be installed in the main line to keep the main sewer full at all times especially
- 86 during periods of low flow to avoid the tendency for air and gas to coalesce at
- 87 high points and restrict the system's hydraulic capacity. Automatic air release
- 88 valves are also installed in the main line to prevent air and gas accumulation
- 89 which could diminish the system's hydraulic capacity.
- 90
- 91 Q. Are there feasible alternatives to the proposed sewer system, such as connection
- 92 to an existing public utility or municipality sewer system or use of alternative

treatment such as lagoon and/or sewer treatment plant, together with reasons for the choice selected.

- A. There are no existing public utilities or municipality sewer systems for which connection is feasible. A lagoon system for this property is impractical. The site is very rolling and placing a lagoon would be difficult if not impossible. There is not enough land outside of the wetland boundaries for the dispersal of the wastewater by spray irrigation.

- Q. Does the company have an Agricultural Impact Mitigation Agreement between the Company and the Illinois Department of Agriculture, in regard to extension of sewer lines [8IAC700, Appendix J, and 505 ILCS 77-Farmland Preservation Act] and if the Company does not have an Agricultural Impact Mitigation Agreement, does the Company plan on contacting the Illinois Department of Agriculture concerning the Agreement?

- A. The Company does not have an Agricultural Impact Mitigation Agreement and does not plan on contacting the Illinois Department of Agriculture because the facility is located entirely within the Corporate boundaries of the Village of Lake Villa and no land or easements are required outside of the subdivision and therefore the Agreement is not required.

- Q. Has the Company contacted the Illinois Historic Preservation Agency to determine if any portion of the proposed sewer has been identified in a historic or archaeological area [20 ILCS 3420-Illinois State Historic Resources Preservation Act]? If yes please explain the results of such contact. If no, please indicate whether such contact will be made and when.

- A. The Illinois Historic Preservation Agency has been contacted with the results being "It has been determined, based on available information, that no significant historic, architectural or archaeological resources are located within the proposed project area".

- Q. Has the Company contact the Illinois Department of Natural Resources and the U.S. Army Corps of Engineers to determine if any portion of the proposed sewer main extension has been identified as a flood plain area and/or wetland [20 ILCS 830 – Integrated Wetland Policy Act of 1989, 615 ILCS 5 – Rivers, Lakes, and Streams Act, and CFR 401]? If yes, please identify the agency contacted and explain the result of such contact. If no, please indicate whether such contact will be made and when.

- A. The Company has contacted the Illinois Department of Natural Resources, the U.S. Army Corps of Engineers and the Lake County Stormwater Management Commission. The results of the contact is that the Department of the Army, Chicago District, Corps of Engineers has jurisdiction over the wetlands and as

such states that the work within the subdivision is in compliance with Regional Permit 1.

Q. Has the Company performed an Endangered Species Consultation Process with the Illinois Department of Natural Resources for the construction of the proposed sewer main extension [Ill. Admin. Code 1075, 520 ILCS 10/11 – Illinois Endangered Species Protection Act, and explain the results of such process. If no, please indicate whether such process will be undertaken and when.

A. An Endangered Species Consultation has been undertaken. The results state that there are no endangered or threatened species or Natural Areas present in the vicinity of the action and that the consultation is terminated.

Q. Has a list been filed with the Chief Clerk of the Illinois Commerce Commission a list containing the name and address of each owner of privately owned tracts of land upon which easements will be sought to construct sewer facilities, as disclosed by the records of the tax collector of the county wherein such land is located [83 Ill. Code 200.150(h)].

A. A list has not been filed as no easements are necessary on privately owned tracts of land for construction of the sewer system.

Q. What is the size, diameter, of the proposed sewer main extension. If the sewer main size is larger than eight inches (8”) in diameter, please explain who will be responsible for paying for the additional cost of the larger pipe. In addition, please provide a justification for installing a sewer main that is larger than eight inches (8”) diameter in size or smaller than six inches (6”) in diameter size.

A. The main line sewer to be utilized for this onsite system is 2 inches in diameter and is sized appropriately, based on standard engineering principals, for the proposed onsite decentralized cluster subdivision. No extension of this system into other areas is proposed or allowed because the facility is designed and sized to be contained entirely within the subdivision.

Q. Have any permits been issued by the Illinois Environmental Protection Agency for the construction of the proposed sewer system and if a permit has not been issued by the Illinois Environmental Protection Agency for the construction of the proposed sewer system, please explain why not.

A. No permits were issued or are required by the Illinois Environmental Protection Agency for construction of the proposed system with the exception of the filing of the Illinois Environmental Protection Agency, Bureau of Land, Class V Injection Well Inventory Form which was filed on March 1, 2007. An IEPA permit is not required for an onsite system with in ground dispersal. For systems utilizing spray irrigation, lagoons, or direct discharge an IEPA permit would be required.

184 Q. Who the officers and directors of the limited liability company, the address of
185 each, and the number of shares held by each and also what is the nature,
186 character, and extent of the interest, if any, of any of the above officers or
187 directors in any other sewer company, or in any other limited liability company,
188 partnership, or corporation that holds an interest in any other sewer company.
189

190 A. Arthur Olson Phillip Grossman
191 965 Westshore Drive 8707 Skokie Blvd.
192 Fox lake, Il. 60020 Skokie, Il. 60077
193 66-2/3% Ownership 33-1/3% Ownership
194 The above members have no interest in any other sewer company or any limited
195 liability company, partnership, or corporation that holds an interest in any other
196 sewer company.
197

198 Q. What is the source of water supply for each of the residences.
199

200 A. All single-family residences shall be served by individually owned and operated
201 wells.
202

203 Q. Explain why no easements are necessary on privately owned tracts of land for
204 construction of the sewer system.
205

206 A. No easements are necessary on privately owned tracts of land because the entire
207 sewer system is contained within the proposed subdivision.
208

209 Q Please provide a copy of the depreciation rates that will be utilized to begin
210 establishing a depreciation reserve
211

212 A. The treatment facility shall be depreciated over 50 years therefore the rate of
213 depreciation shall be set at 2.0% per year.
214

215 Q. Have you prepared financial statements (balance sheets) showing in detail the
216 Company's assets, liabilities, and net worth for 2007, and projected balance sheets
217 for 2008 through 2011.
218

219 A. I have prepared balance sheets and they are shown as Amended Attachment 5 to
220 the Original Petition.
221

222 Q. Please provide the Company's experience in installing, operating and maintaining
223 this type of sewer system in Illinois and in any other state. Please indicate the
224 number and location of each of this type of sewer system that the Company is
225 aware of that is currently operating in Illinois and in any other state.
226

227 A. Four locations in Illinois utilizing similar sewer systems are:
228

- 229 1) Village of New Minden – 119 Septic Tank Effluent Gravity
230 connections, 11 Septic Tank Effluent Pump connections, recirculating
231 granular filter, final dispersal to stream.
232 2) Village of Browns – 99 connections, recirculating sand filter, final
233 discharge to stream
234 3) Newport Cove – Lake County – 67 Septic Tank Effluent Pump
235 connections, recirculating sand filter, final dispersal to drip field.
236

237 Four Locations in others states.
238

- 239 1) South Alabama Utilities, Semmes, Alabama – Seven plants serving
240 2000 connections at build out
241 2) Diamond Lake Water and Sewer Commission, Washington – 500
242 connections
243 3) Elkton, Oregon – 100 connections
244 4) Applied Wastewater Management, Inc, - New Jersey – 3700
245 Connections
246

247 This particular system manufactured by Orenco utilizing a recirculating textile
248 packed bed filter has not been installed in Illinois. Mr. Olson has taken courses
249 at Orenco's headquarters in Sutherlin, Oregon in Operation and Maintenance of
250 Step Systems, Pressure sewers and media filters. M. Olson Qualifications can be
251 found in his Direct Testimony under Number 11 in Docket Numbers 07-0331 and
252 07-0332.
253

254 Q. What is RME Illinois' investment in this docket?
255

256 A. The Company is investing \$6000 per lot or \$54,000 toward construction of the
257 central plant and the developer is paying for the remainder of the construction
258 costs as Contribution in Aid of Construction.
259

260 Q. Do you have a detailed estimate of the cost of construction of the proposed sewer
261 system?
262

263 A I have a detailed estimate of the cost of construction of the proposed sewer system
264 shown as Exhibit No. 1.01-A and Exhibit 1.01-B to this testimony
265

266 Q. Does the company intend to follow the Uniform System of Accounts for Sewer
267 Utilities Operating in Illinois?
268

269 A. The company intends to follow the Uniform System of Accounts for Sewer
270 Utilities Operating in Illinois.
271

272 Q. What return on rate base is being proposed in the rates proposed?
273

274 A. The return being proposed on the rate base is 9%.

275 Q. Does the company have a summary of the Annual Operating expenses for this
276 Docket?

277
278 A. Yes I have a summary of the Annual Operating Expenses and a breakdown which
279 is attached to this testimony as Exhibit No. 1.01-C and 1.01-D
280

281 Q. Has a revenue requirement schedule been provided for this docket.
282

283 A. The revenue requirement schedule is included in Amended Attachment 5 to the
284 original petition.
285

286 Q. Do you have any other sources that can justify the operation and maintenance
287 costs utilized in this docket.
288

289 A. I have a copy of the nationwide averages for the operation and maintenance of
290 that portion of the components manufactured by Orenco from Dr. Eric Lanning of
291 Orenco. The document has been attached to this supplemental testimony as
292 Exhibit 1.01-E.
293

294 Q. Does this conclude your direct supplemental testimony.
295

296 A. Yes
297
298
299
300
301
302
303
304

